

1 16. (amended) A semiconductor light-emitting device comprising:

2 a substrate having a back surface provided with an  
3 n-type lower electrode;

4 a light-emitting layer provided on said substrate;

E1 5 a p-type semiconductor layer provided on said  
6 light-emitting layer; and

7 an upper electrode provided on said p-type  
8 semiconductor layer;

9 wherein said upper electrode includes an Au thin film  
10 positioned in contact with said p-type semiconductor layer  
11 and an n-type transparent semiconductor film formed on said  
12 Au thin film; and

13 wherein said Au thin film has a thickness of 1 nm to  
14 3 nm and said n-type transparent semiconductor film is made  
15 of  $\text{In}_2\text{O}_3$  - 10 wt.% ZnO.

Please cancel claims 17 and 18.

E2 1 19. (amended) The semiconductor light-emitting device according  
2 to claim 16, wherein said transparent semiconductor film of  
3  $\text{In}_2\text{O}_3$  - 10 wt.% ZnO is formed by laser ablation and has  
4 characteristics as result from being formed by laser  
5 ablation.

1 20. (amended) The semiconductor light-emitting device according  
2 to claim 16, wherein said thickness of said Au thin film is  
3 in a range of 2 nm to 3 nm and said n-type transparent

4 semiconductor film is a layer of said  $\text{In}_2\text{O}_3$  - 10 wt.% ZnO  
5 having a thickness of 180 nm to 200 nm.

1 21. (amended) The semiconductor light-emitting device according  
2 to claim 16, wherein said n-type transparent semiconductor  
3 film has a multilayer structure including an upper layer  
4 and a lower layer, said lower layer having a flattened  
5 surface, and said upper layer having an uneven surface.

1 22. (amended) The semiconductor light-emitting device according  
2 to claim 16, wherein said n-type transparent semiconductor  
3 film was deposited at room temperature and said device has  
4 characteristics as result from said n-type transparent  
5 semiconductor film having been deposited at room  
6 temperature.

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Please add new claims 23 to 29 as follows.

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1 23. (new) The semiconductor light-emitting device according to  
2 claim 16, wherein said p-type semiconductor layer is a  
3 semiconductor layer selected from the group consisting of  
4 a ZnSe-based semiconductor layer, a ZnTe-based  
5 semiconductor layer and a BeTe-based semiconductor layer.

1 24. (new) The semiconductor light-emitting device according to  
2 claim 16, wherein said Au thin film is discontinuous so as  
3 to cover first areas of said p-type semiconductor layer  
4 while leaving second areas of said p-type semiconductor

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5 layer uncovered, and said n-type transparent semiconductor  
6 p.9 film covers both said Au film and said second areas of said  
7 p-type semiconductor layer which are not covered by said Au  
8 film.

1 25. (new) The semiconductor light-emitting device according to  
2 claim 24, wherein said Au thin film comprises separate  
3 discontinuous islands of said Au thin film respectively  
4 covering said first areas of said p-type semiconductor  
5 layer.

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cont.  
1 26. (new) The semiconductor light-emitting device according to  
2 claim 16, wherein said n-type transparent semiconductor  
3 film contains oxygen with such an oxygen content that  
4 minimizes an oxygen-content-dependent variable electrical  
5 resistance of said n-type transparent semiconductor film  
6 for a given thickness thereof.

1 27. (new) The semiconductor light-emitting device according to  
2 claim 26, wherein said n-type transparent semiconductor  
3 film is formed by adjusting the partial pressure of oxygen  
4 in a laser ablation film forming method.

1 28. (new) The semiconductor light-emitting device according to  
2 claim 16, wherein said Au thin film and said n-type  
3 transparent semiconductor film are respective solid  
4 continuous films, and said upper electrode does not include  
5 a grid-shaped electrode.

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concl.

1     29. (new) The semiconductor light-emitting device according to  
2     claim 16, wherein said p-type semiconductor layer and said  
3     n-type transparent semiconductor film would form a p/n  
4     junction at an interface therebetween but for said Au thin  
5     film interposed therebetween, and wherein said thickness of  
6     said Au thin film is sufficient to prevent the formation of  
7     a p/n junction between said p-type semiconductor layer and  
8     said n-type transparent semiconductor film.

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REMARKS:

- 1) The Examiner has not yet expressly acknowledged the receipt and entry of the Supplemental Amendment filed on October 3, 2001, the drawing correction filed on October 3, 2001, and the further drawing correction filed on October 26, 2001. The Examiner is respectfully requested to review the file to ensure that these papers have been received and entered, and to expressly acknowledge the same in the next official communication. Particularly, the Examiner is requested to approve the drawing corrections of October 3, 2001 and October 26, 2001, so that proper corrected formal drawings incorporating the corrections can be filed.

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